

Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 3 — CHART INFORMATION

SECTOR 3

THE RED SEA—CENTRAL PASSAGE

Plan.—This sector describes the principal islands and dangers lying in the central passage of the Red Sea between Madiq Gubal and Ras Bab al Mandeb. The descriptive sequence is from NNW to SSE.

General Remarks

3.1 The central passage through the Red Sea from Madiq Gubal as far as Jabal Attair, about 830 miles SSE, is free from dangers, but the direct course passes much closer to the E side of the Red Sea than the W.

It is advisable, therefore, to steer from near Daedalus Reef for a position about midway between the coastal banks, from where a vessel can proceed to Jabal Attair.

Ships using the central track should keep in depths over 183m until about 28 miles from Az Zuqur if making for Abu Ail Channel, but if intending to pass W of that island they should not proceed into depths less than 183m until W of the N extremity of Hanish al Kabir, the largest island of the Hanish Islands.

Winds—Weather.—In the Red Sea N of 20°N, the wind is mainly from between NW and N in all months. Over the remainder of the Sea such winds are predominant from May to September; from October to April, the wind is mainly from between S and SE.

There is no record of any cyclone having entered the Red Sea, and thunderstorms are infrequent, as is rainfall. It is extremely hot from June to September and the heat, combined with the high humidity in the S part of the Red Sea during these months, makes the climate oppressive.

Tides—Currents.—Currents setting in any direction may be experienced throughout the year in the main shipping track of the Red Sea. The velocity of the majority of currents experienced in any direction does not exceed 1 knot, and only on rare occasions does it exceed 2 knots. Currents in the vicinity of islands near the central passage will be described with their related features.

Mean sea level is about 0.2m higher in January and about 0.2 to 0.3m lower in August and September, but meteorological conditions, barometric pressure, and wind may cause local variations.

Caution.—Unconfirmed reports were received concerning explosions, possibly caused by mines, near ships in the area of Ras Bab al Mandeb.

Additionally, a vessel was believed to have struck a mine at position 18°25'N, 40°10'E.

Another vessel was reported to have struck a mine in the position 26°48'N, 34°39'E.

No further reports have been received concerning mining activities in the Red Sea.

The areas concerned are believed to be safe for surface navigation. However, vessels are urged to exercise the appropriate caution.

Cross currents, setting in E or W directions, are not infrequent and are observed both in the middle of the central passage and elsewhere. A good berth should be given to all outlying reefs and shoals; this is most important, as the velocity of these currents increases rapidly as the reefs are approached.

Caution is particularly necessary when approaching Madiq Gubal from S, and when proceeding S from the vicinity of the Suakin Archipelago to Jazirat Az Zuqur.

In mid-channel of Madiq Gubal, the velocity of the tidal current is from 1.5 to 2 knots, but within 2 miles of the reefs the direction is uncertain. There appears to be no perceptible tidal current elsewhere until near Ras Bab al Mandeb.

Islands and Dangers in Central Passage

3.2 El-Ikhwan (El Akhawein) (The Brothers) (26°19'N., 34°51'E.), consisting of North Islet and South Islet, are nearly steep-to.

They are separated from each other by a channel about 1 mile wide. El-Ikhwan is reported to give a good radar return up to a distance of 15 miles.

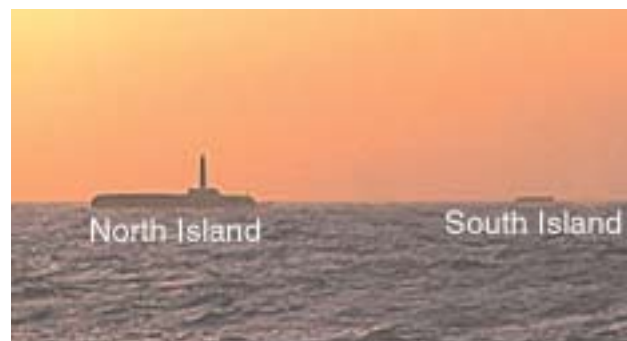
The channel between the islets has depths of about 73 to 344m. Both islets are fringed by reefs. A depth of 5.5m extends about 137m NW from the NW extremity of South Islet.

Abnormal refraction has enabled these islets to be seen from a distance of 100 miles.

On the SW side of North Islet, there is an iron pier, 55m long, which extends to the reef. On the SE extremity of the same islet, there is a bollard to which vessels can secure during N winds, riding by a single line.

A light, with a racon, stands on North Islet.

Tides—Currents.—When passing the islets, especially at night, it is well to give them a fairly wide berth, as currents occasionally set W in their vicinity.



El Ikhwan from NW

3.3 Daedalus Reef (Abu el Kizan) (24°56'N., 35°52'E.) sometimes dries during LW but is always covered at HW. It is steep-to and may be passed on either side.

A light, with an iron pier extending from it, stands on the SW end of the reef. A racon is located at the light.

Daedalus Reef is reported to give a good radar return up to a distance of 14 miles. It is a poor target when bearing 250°.

An area of discolored water was reported to lie approximately 60 miles SSE of Daedalus Reef.

Tides—Currents.—Between Daedalus Reef and Ellkhwan, a vessel experienced a current setting NE at a velocity of about 0.5 knot.

Caution.—The coral reefs surrounding El-Ikhwan and Daedalus Reef have been declared protected areas. Anchoring on the reefs is prohibited except in an emergency.

From Daedalus Reef to Jabal Attair, about 660 miles SSE, the central passage is clear of dangers. A direct course between these two places passes much closer to the E shore of the Red Sea, than the W shore.

To keep more nearly in the middle of the passage, it is advisable to steer for a position in 17°00'N, 40°40'E, which is about midway between the banks off-lying each shore, and then proceed to Jabal Attair.

Abnormal magnetic variation has been observed along a line extending from a position 28 miles E of **Elba Reef** (22°00'N., 37°00'E.) to a position about 60 miles N of Elba Reef.

3.4 Jabal Attair (15°33'N., 41°50'E.) has a large central peak which is brown in color. The other peak is conical in shape on some bearings; there is a steep, rocky, yellow bluff on the SE side of the island. Sulphurous jets of steam appear at the summit of the island, but no smoke has been seen in recent years.

From NW and SE, the island appears high and conical, sloping gradually toward the coasts. It is steep-to and a good landmark.

Jabal Attair is reported to give a good radar return up to a distance of 20 miles. It could be mistaken for a ship. A light is situated on the island.

The coastal banks, with less than 183m, lie about 11 miles E and 9 miles W of this island. Navigation is dangerous within the outer edges of these banks. Abnormal magnetic variation has been observed within a distance of 5 miles from the island.

Tides—Currents.—A current setting NW and NNW, at a velocity of about 2 knots, was experienced for 5 days, about 12 to 16 miles N and E of Jabal Attair; a strong SSE wind was blowing at the time.

During December, the currents have been observed to set between Jabal Attair and Jaza'ir az Zubayr in an E direction at a velocity of nearly 1 knot. During May, they have been observed to set between NW and NE at a velocity of from 0.5 to 1 knot. During June, little or no current has been observed in this area.

Anchorage.—From the beginning of May to the end of August, with the prevailing winds from the NW and WNW, anchorage can be taken off the S side of Jabal Attair.

The approach to the best berth is with the light structure bearing about 305° and anchoring in 29.3m, with the E and W extremities of the island bearing 062° and 273°, respectively.

The nearest danger to this berth has a depth of 5.5m and is about 0.4 mile distant. Discolored green water appears to extend from some distance offshore, with a bottom of white sand, but no depth of less than 10.1m has been found.

There is very little current at this anchorage. Vessels have anchored N and W of the light structure, but it is not advisable, as the depths are considerable.

3.5 Jaza'ir az Zubayr (15°03'N., 42°10'E.) are a group of islands, islets, and rocks extending about 13 miles in a SSE direction. This group is rugged and almost entirely devoid of vegetation, except Saba Island, on which are a few stunted bushes.

Jaza'ir az Zubayr were reported to lie between 1 mile and 2.5 miles SW of their charted positions.

Quoin Islet (15°12'N., 42°04'E.) is of a light brown color. It is not easily distinguishable at night and if passing close to this group, a good lookout should be maintained. Deep water is about 0.2 mile off it. A light is shown from a white square building on the summit.

Haycock Island (15°10'N., 42°07'E.) is rather steep-to. Two patches of 35 and 16.5m lie between this island and Quoin Islet.

Rugged Island, Table Peak Island, Saddle Island, and Low Island all lie on a rocky bank having depths less than 37m.

This bank extends to within about 0.5 mile SW of Haycock Island. A small group of rocks, the highest of which is 25m high, lies a little less than 0.5 mile WNW of the NW side of Saddle Island. A rock, 7.9m high, lies about 0.5 mile E of the S extremity of Low Island.

These islands are fringed by banks, with less than 5.5m over them, which, in places, extend as much as 0.5 mile offshore.

There is a least depth of 9.1m in the fairway between Rugged Island and Table Peak Island and a least depth of 6.4m between the latter island and Saddle Island. The bottom is sand, coral, and shells. On the bank E of Saddle and Low Islands is a least depth of 6.4m.

Saba Island (15°05'N., 42°09'E.) has two prominent hills, both having craters. Two lagoons, connected to the sea, are fringed with mangroves. The island is bordered by a reef which extends nearly 1 mile SSW. Connected Island lies on the S edge of this reef, and Shoe Rock, 5.2m high, is on the SE edge of the reef in a position about 0.5 mile NE of Connected Island. Saba Island is reported to give a good radar return up to a distance of 20 miles.

3.6 Jabal Zubayr (15°04'N., 42°10'E.) has a central hilly range extending from the N extremity of the island to its S end; North Peak, a little over 0.5 mile from the N extremity of the island, is square-shaped.

A 224m conical hill, about 0.3 mile N of the S extremity of the island, is the summit of this range. A stranded wreck is reported to lie close S of the island.

Centre Peak Island, the southernmost island of the Jaza'ir az Zubayr group, is steep-to. Some water tanks stand on the beach of a small bay on its SW side. A 172m hill, the highest on the island, has a disused light structure standing on it, about 0.5 mile N of the S end of Centre Peak Island. Another disused light structure stands at an elevation of 158m on the SE end of the island. A light is shown on the islet.

The channel between Centre Peak Island and Jabal Zubayr is about 0.5 mile wide and has a least depth of 12.8m. A current, caused by local winds, is sometimes strong.

Centre Peak Island is reported to give a good radar return up to a distance of 19 miles.

Tides—Currents.—In the vicinity of Avocet Rock and Ras Mujamilah, about 18 miles NE, little or no current has been experienced during October, November, and December, although S winds were blowing almost constantly.

During the Northeast Monsoon, there is often a heavy sea from about 15 miles N of Jazair Abu Ail to about 15 miles NW.

Anchorage.—From the beginning of May to the end of August, during the prevailing NW winds, anchorage can be taken, in 21.9m, mud, with the disused light structure near the center of Centre Peak Island bearing 240°, distant about 0.5 mile. During August, vessels should not lie here during the night, as squalls of rain and wind from SE sometimes occur at sunset.

At other times of the year, with prevailing SSE winds, anchorage can be taken, in 14.6 to 18.3m, in the middle of the channel between Saba Island and Jabal Zubayr.

The best position is with the E extremity of Saba Island bearing 000°, the N extremity of Jabal Zubayr bearing 071°, and Shoe Rock nearly in range with the N extremity of Connected Island.

This channel has a least width of about 0.1 mile in the fairway. With SW winds, which are frequent during the winter, this anchorage is open to wind and sea and is not recommended.

Caution.—Middle Reef, with depths of less than 1.8m, lies in a position about 2 miles E of Low Island. It is narrow and steep-to; the sea breaks over it with any swell.

East Rocks consists of one rock, 1.5m high, and a rock, with less than 1.8m, on which the sea breaks, about 183m farther NW; they lie about 3 miles NE of North Peak on Jabal Zubayr and are steep-to within 183m.

Williamson Shoal, about 1.5 miles SSW of East Rocks, has a least depth of 10.1m. Evans Rock, a pinnacle with a depth of 7.3m, lies about 1.5 miles E of the S extremity of Jabal Zubayr. A small steep-to coral shoal, with a depth of 5.5m, lies about 0.7 mile SW of Evans Rock.

Shark Shoal, about 2.5 miles SE of the SE extremity of Centre Peak Island, has a least depth of 12.8m, coral. There are often reports of tide rips in the vicinity of this shoal.

South Shoal, with a least depth of 25m, lies about 2 miles SSE of the SE extremity of Centre Peak Island.

Penguin Shoal lies about 11 miles to the ESE of the SE extremity of Jabal Zubayr; it is a small, steep-to rocky patch, with a depth of 6.4m.

Caution should be exercised in this vicinity as it has not been closely examined. Similar shoals may be close by. The passage E of Jaza'ir az Zubayr is not recommended.

Avocet Rock (14°22'N., 42°42'E.) is a small steep-to coral patch, with a least depth of 5m.

Jabal Zuqar and the Hanish Islands

3.7 The islands comprising this group are dark brown volcanic hills with rocky eminences of various shapes. Jabal Zuqar and Hanish al Kabir are the principal islands.

Jazair Abu Ali (14°05'N., 42°49'E.) are barren, and being whitish-brown in color, are not easily seen at night. Reefs and rocks border this group as far as 91m offshore.

Jazair Abu Ali are reported to give a good radar return up to a distance of 17 miles. Quoin Island is marked by a light and reported to give a good radar return up to a distance of 10 miles.

An islet, 1.8m high, whose N end lies about 0.1 mile SSW of the W extremity of Quoin Island, has some sunken rocks close off its N and S ends; shoal water extends about 0.1 mile E from its S extremity.

The channel between this islet and the SW side of Quoin Island should not be used. A bank, with a depth of 23m, lies about 3.5 miles NE of Quoin Island.

Pile Island, 87m high, lies about 0.1 mile NE of Quoin Island and is composed of two parts joined by a reef. Pile Island is fringed by rocks and reefs on its N and W sides, is almost steep-to on its E side, and is inaccessible.

Anchorage.—Anchorage, in 16.5m, sand and coral, can be taken between Pile Island and Quoin Island with the light structure on Quoin Island bearing 270°, distant approximately 0.3 mile. This anchorage is considered safe only from the middle of May to the middle of December during the prevailing NNW winds.

Occasional wind and rain squalls from SE occur in August, and vessels are advised not to remain at the anchorage when they take place. At other times of the year this anchorage is unsafe.

3.8 Qanat Abu Ali (Abu Ali Channel) (14°04'N., 42°48'E.), between the NE side of Az Zuqur and the SW side of Quoin Island, is deep and free from dangers in the fairway; it has a navigable width of about 2 miles.

Vessels should keep in the middle of the channel, as tidal currents here are very irregular and occasionally set across it.

At night or in hazy weather, the high land of Az Zuqur often has a peculiar distant appearance and East Point, being low with white sand behind it, may then resemble water and not be identified until dangerously close to it.

Vessels from either direction should keep in mind the rocks SW of Quoin Island and the dangers off East Point.

3.9 Az Zuqur (Jabal Zuqar) (14°00'N., 42°45'E.), the highest island in the Red Sea, rises to lofty barren hills, which appear as sharp peaks on some bearings. The N side of the island is bordered by reefs, which extend about 0.5 mile offshore, W of North Point, the low N extremity of the island.

West Point, the W extremity of the island, and all the extremities on the W, S, and E sides of the island, as far N as East Point, its E extremity, can be approached to within 0.5 mile.

Between North Point and East Point, the coast is fringed by reefs which extend about 91m offshore. Each point is low and rocky. A 4.6m patch was reported to lie about 0.2 mile ENE of East Point; a sunken wreck lies in about the same approximate position.

A bank, with a least depth of 21.9m, lies about 2 miles ESE of East Point. A depth of 18m was reported to lie about 1 mile E of East Point. Az Zuqur is reported to be radar conspicuous.

High Island has a rather conical appearance from N and a flat appearance from SE. Its S extremity lies about 1 mile N of North Point; the island is steep to within 183m. High Island is reported to give a good radar return up to a distance of 14 miles.

3.10 Shark Island (13°58'N., 42°42'E.) lies about 2.5 miles SSE of West Point on Az Zuqur. A rock, awash, lies close off the NW extremity of the island and a sunken rock lies close off the middle of its E side. The SW side of Shark Island is fringed by reefs.

Tides—Currents.—Tidal currents around Az Zuqur are very irregular, but they appear to set along its coasts. At the anchorage on the N side of the island, it was reported that the flood current sets SW at 2.5 knots and the ebb sets NE.

Anchorage.—An anchorage for small vessels, sheltered from S winds, is in a bay on the NE side of Az Zuqur, about 0.3 mile NW of East Point; a swell sets into this anchorage.

There is good shelter from S winds for large vessels, in 20.1m, sand and coral, with the summit of Quoin Island, bearing about 085° and just open of North Point; a charted dark square tomb near the coast, about 1.5 miles WSW of North Point, bearing 187°; and the 624m summit of Az Zuqur bearing 166°.

This anchorage is reported to be about 0.5 mile from the coastal reef.

Anchorage can generally be taken off the NW side of Az Zuqur, in 12.8 to 18.3m, between about 0.1 to 0.2 mile off the coastal reef, and in 31 to 48m, about 0.5 mile off this same reef.

South Bay, on the SW side of Az Zuqur, offers good anchorage between Near Island and the large projection of the SE side of the island. The best berth is in the NW part of the bay, in 14.6m, midway between the N part of Near Island and the coast of Az Zuqur, with the N extremity of Near Island bearing 289°.

Anchorage can be taken in the E part of South Bay, in 22m, coral, with a point a little over 0.5 mile ESE of the NE extremity of Near Island in range 294° with the N extremity of Near Island, and the SE entrance point of the bay bearing 191°.

There are two stone huts and a hut for water tanks on the NE shore of South Bay.

A small bay at the S end of Az Zuqur offers anchorage, in 9.1 to 11m, sand and coral, about 183m E of the W entrance point.

The reefs fringing the shores of this bay can generally be seen.

3.11 Tongue Island (13°53'N., 42°43'E.) lies about 2.5 miles WSW of the SW extremity of Az Zuqur, with a deep channel, clear of dangers, between them. About 0.2 mile from its S side is a low rock connected by sunken rocks with the SW extremity of the island and enclosing a basin, with a least depth of 11m.

Hanish as Saghir (13°52'N., 42°47'E.) lies about 2 miles SSE of the S extremity of Az Zuqur; the channel between them is deep and free from dangers.

The island is hilly and rugged but its summit is not easily distinguished. When approaching from N or S, a peak, 162m

high, in the NE part of the island, shows up well and, when seen from SW, resembles a small peak in the act of falling.

A group of rocky islets, lying from about 0.1 mile to about 2 mile NE of the NE extremity of Hanish as Saghir, lies on a shoal with depths less than 18.3m, which connects it with the island and extends about 0.5 mile NNE of the islets.

Low Island, marked by a light, lies almost 0.5 mile E of the N part of Hanish as Saghir; a shoal with a least depth of 7.3m, extends about 0.5 mile N from Low Island. On the N part of the shoal is an islet, about 7.6m high.

A rock, 10.6m high, lies about 183m SE of Low Island; Fawn Rock, nearly awash, lies about 0.1 mile ESE of this rock.

A chain of rocks and a narrow islet lie from 91m to about 0.5 mile SSW of the S extremity of Low Island; a 14.6m patch is about 0.2 mile S of the S end of the islet.

A small rocky patch, with a depth of 12.8m, lies about 1.5 mile ESE of the 10.6m high rock; although this was the least depth found during a survey, lesser depths may exist, and Low Island should be given a wide berth. The channel between Hanish as Saghir and Low Island is navigable and has a least depth of 11.0m.

Tides—Currents.—The current in the channel between Hanish as Saghir and Low Island sets S from about HW in Qanat Abu Ail until about 4 hours 30 minutes before the next HW there.

Anchorage.—Anchorage, in 21.9 to 27.4m, sheltered from S winds, can be taken in the channel between Hanish as Saghir and Low Island, with the W extremity of the islet S of Low Island just open W of the W extremity of Low Island and bearing 187°, and the 7.6m islet off the N extremity of Low Island bearing 049°.

In the S part of the channel, anchorage can be taken, in 33 to 37m, with the NE extremity of Hanish as Saghir bearing 347° and the SE extremity of that island bearing 227°.

Anchorage, in 12.8 to 20.1m, sheltered from S winds and sea, can be taken N of Hanish as Saghir with the 162m peak bearing 180° and the semicircular-shaped islet close NE of the N extremity of the island bearing 090°. This anchorage is reported preferable to those in the channel.

3.12 Hanish Al Kabir (13°44'N., 42°44'E.), marked by a light shown from near its NW extremity, is separated from Al Hanish as Saghir by a deep channel free from dangers. It is hilly and the highest peak rises to 407m near the middle of the island; on some bearings this elevation appears as a prominent bluff.

A low strip of sand crosses the island about 3 miles from its SW extremity and, due to the land on both sides of it being high, that part of the island SW of this strip appears, from a distance, on NW and SE bearings, as a separate island.

Hanish al Kabir is reported to give a good radar return up to a distance of 21 miles.

Tides—Currents.—Tidal currents in the vicinity of Hanish al Kabir are rather strong and set N on the flood off the E coast of the island, and set strongly S on the ebb off the SW coast.

Anchorage.—Anchorage, sheltered from N winds, can be taken in a number of places off the E side of Hanish al Kabir, the depths outside the coastal reef being fairly regular. The best anchorage is about 0.5 mile off the coastal reef, in 25.6 to 33m,

with the SW extremity of Double Peak Island bearing 135°, and the SE extremity of Hanish al Kabir bearing 238°.

A vessel has anchored in 18.3m, sand and coral, good holding ground, sheltered from S winds, in a position about 0.5 mile ESE of Peaky Island. Southeast Bay, at the SW end of Hanish al Kabir, affords anchorage, in 33m, sand and coral, about 0.3 mile WSW of the E entrance point.

3.13 Marescaux Rock (13°46'N., 42°42'E.), about 4.5 miles WSW of the N extremity of Hanish al Kabir, has less than 1.8m; the sea generally breaks on it. This rock has not been examined and its position should be avoided.

Peaky Island (13°47'N., 42°45'E.) is reported to give a good radar return up to a distance of 20 miles.

Haycock Island (13°47'N., 42°47'E.) lies about 0.3 mile NE of the N extremity of Al Hanish al Kabir. From S it resembles a haycock, but when observed from close E, it appears to be hollowed out like a saucer.

The channel between the two islands has a least depth of 14.6m in the fairway; a rock, with a depth of less than 1.8m, lies about 183m off the SW side of Haycock Island.

Addor Ail Islets, lying about 1 mile E of Haycock Island, attain an elevation of 37m. The islets form a circle, within which is a basin with a small opening from seaward.

3.14 Jazirat Mushayjirah (13°47'N., 42°50'E.), about 1.7 miles SE of Addar Ali Islets, can be approached on its W and S sides to a distance of 0.2 mile, but a reef extends about 91m N and 0.5 mile E from it. The islet is only 7.3m high and not easily seen at night. A bank, with a least depth of 11m, lies about 0.4 mile NNW of this islet.

Tides—Currents.—Off Haycock Island, the tidal current sets SE on the ebb tide. There are tide rips between Haycock Island and Mushajjara Islet.

Depths—Limitations.—The channels between **North Round Island** (13°43'N., 42°47'E.) and Hanish al Kabir, and between North Round Island and Quoin Island, about 0.5 mile E, are clear of dangers, and have depths ranging from 21.9 to 48m.

Chor Rock (13°41'N., 42°45'E.) lies in a position about 2.5 miles SW of North Round Island. It lies on a bank having depths of 3.7 to 18.3m and extending about 1.5 miles E from Hanish al Kabir. Some black rocks lie close NW of Chor Rock.

Round Island, lying 3 miles ESE of Chor Rock, is dark in appearance.

Parkin Rock (13°38'N., 42°49'E.) lies about 2.5 miles SSE of Round Island. Caution is necessary when near this rock as depths in its vicinity are almost uniform and give no warning of its proximity unless it is sighted.

3.15 Rocky Islands (13°38'N., 42°47'E.) consist of three black, rugged islets and some small rocks. They lie near the S end of a bank having depths of 7.3 to 37m and which extends about 1.5 miles SSW from a position about 1.5 miles NNE of the highest islet.

Double Peak Island (13°39'N., 42°45'E.) lies about 1.5 miles S of Chor Rock; it is steep and has two small peaks close together.

A shoal with less than 9.1m, and with two small above-water rocks at its NE edge, extends over 0.5 mile NE from the NE end of the island.

The channels between Double Peak Island and **Mid Islet** (13°39'N., 42°45'E.) and between Mid Islet and Suyul Hanish, 0.5 mile S and rugged, are free from dangers and have least depths of 7.3 and 16.5m, respectively.

The channel between Suyul Hanish and Hanish al Kabir is clear and free of dangers, except for the banks on which lie Chor Rock, Pin Rock, and Cust Rock and a reported depth of 16.5m lying in mid-channel between Chor Rock and Double Peak Island.

Sheltered anchorage can be taken in several places off Suyul Hanish.

3.16 Ship Rock (13°36'N., 42°43'E.), about 1 mile SW of Suyul Hanish, has depths of less than 1.8m, and lies on a shoal with a least depth of 7.3m, the latter extending about 0.3 mile N and S of the rock.

Three Foot Rock, about 2.5 miles SW of Suyul Hanish, is 0.9m high and steep-to. Currents of 1.5 knots have been experienced in the vicinity of Three Foot Rock. A depth of 27m was reported about 2 miles ESE of Three Foot Rock.

Pin Rock (13°38'N., 42°42'E.) lies about 3 miles W of the NW extremity of Suyul Hanish. Cust Rock is a little over 0.5 mile WNW of Pin Rock and has less than 1.8m.

Pin Rock and Cust Rock lie on a bank with depths of 20.1 to 37m, but there are depths of from 7.3 to 12.8m within 0.2 mile N of Pin Rock.

Southwest Rocks (13°39'N., 42°36'E.), about 5 miles W of Cust Rock, comprise a rock, 6.7m high, with an above-water rock and a sunken rock close off its E side; they are steep-to.

3.17 The Haycocks (Scogli Haycocks) (13°32'N., 42°37'E.) consist of three islets. Northeast Haycock lies about 6.5 miles SW of Suyul Hanish; Middle Haycock, cone-shaped, lies about 1 mile farther WSW. Southwest Haycock, about 1 mile SW of Middle Haycock, is 52m high.

Muhabbaca Islands (Isole Mohabbacah) (13°24'N., 42°36'E.) are four islets extending 5 to 12 miles S and SSW of The Haycocks. They have a white appearance and at times are difficult to identify. High Islet (Isola Alta), the N islet of the group, lies about 5 miles SSW of Southwest Haycock.

Flat Islet (Isola Piana) lies in a position about 3 miles SW of High Islet and has a large hole at its N end, which shows up on certain bearings. Harbi Island (Isola Harbi) lies about 6 miles ESE of Flat Islet and rises vertically from the sea.

Sayal Island (Isola Saial) lies about 5 miles SSE of Flat Island; it is small and rocky. Depths are considerable in the vicinity of these islets. Depths of 29m and 16.5m were reported 8 and 10 miles E, respectively, of Harbi Island.